$\begin{array}{c} \text{Part } 1 \\ \text{System Maintenance and Operations} \end{array}$

PART 1

SYSTEM MAINTENANCE AND OPERATIONS

OVERVIEW

The 2001 RTP dedicates a portion of funds to sustaining the Bay Area's substantial existing multi-modal transportation investments, including transit capital, local streets and roads maintenance, Transportation for Livable Communities, and Surface Transportation Program (STP) planning funds. Part 1 describes these projects and programs, as outlined below.

1.1 Financial Summary of Regional Priorities

MTC has identified several regional projects and programs that provide regional benefits or are most efficiently administered at the regional level. These regional priorities have the "first-call" on Track 1 funds; residual Track 1 funds are then assigned to each of the nine counties. A financial summary of the regional priorities is provided. Detailed descriptions of these projects are contained in Parts 1 and 2 of this Notebook.

1.2 Transit Operator Financial Analysis

Financial profiles for each of the Bay Area transit operators are described, focusing on the 25-year costs to maintain and operate the Bay Area's transit systems at current levels. The summaries provide information on funding sources and projected deficits or surpluses over the 25-year period. In the 1998 RTP, the Commission adopted a policy to fully fund all transit capital replacement shortfalls. This policy has been carried forward to the 2001 RTP.

1.3 Local Streets & Roads, Non-Pavement and Bridge Needs Financial Analysis

MTC gives high priority to continuous and timely maintenance of the region's streets and roads to protect past investments. The 2001 RTP fully funds all MTS pavement maintenance shortfalls and gives the counties the discretion to assign additional Track funds to all other shortfalls based on local priorities. This analysis includes pavement maintenance, non-pavement maintenance, and bridge maintenance.

1.4 Surface Transportation Program (STP) Planning Funds Surface Transportation Program (STP) funds have been reserved for planning subventions to Congestion Management Agencies and county transportation agencies that provide coordinated planning and programming functions at the local level.

1.5 Transportation for Livable Communities (TLC)

The TLC program is a Commission initiative that debuted in 1998. It focuses on providing planning and capital assistance to small-scale transportation projects that link transportation and land use decisions that, in turn, promote livable communities in the Bay Area. In 2000, the Commission expanded the TLC program to include the Housing Incentive Program (HIP), which funds TLC capital projects in cities and counties that propose to increase the housing supply near an existing trunkline transit system.

1.1 FINANCIAL SUMMARY OF REGIONAL PRIORITIES

	THIL T RIGI	WIII CO	1		1					
	m . 1m . 1	Federal New	n 1 1n	Regional Measure 1	4.00					Federal Public
	Total Track 1 Revenues	Starts Program	Federal Bus Program	Extension Reserve	AB 434/CARB	AB1171	STP/CMAQ	RTIP	ITIP	Lands Highway
	\$8,628.0	\$1,266.0	\$227.0	\$176.0		\$360.0	\$2,368.0	\$2,858.0	\$1,263.0	
REGIONAL TRANSIT EXPANSION	\$1,989.9	\$1,266.0	-	\$176.0		\$360.0	Ψ2,300.0	Ψ2,030.0	Ψ1,203.0	ΨΟΟ.
Subtotal Regional Transit Expansion		\$1,266.0	\$137.9	\$176.0		\$360.0				
SYSTEM PROGRAMS	ψ1,505.5	ψ1,200.0	φιστισ	Ψ170.0	ψ50.0	Ψ200.0				
System Management Programs (1)										
Highway Management										
Freeway Operations Strategies/TOS	\$45.5						\$45.5			
Freeway Service Patrol/Callboxes	\$39.6						\$39.6			
TETAP/Arterial Signal Re-timing	\$31.9						\$31.9			
PTAP	\$15.4						\$15.4			
Transit Connectivity										
TransLink®	\$138.8						\$138.8			
Regional Transit Info/Transp. Marketing Multimodal Services/Integration	\$28.9						\$28.9			
Ridesharing Program	\$55.9						\$55.9			
TravInfo™	\$126.0						\$126.0			
Spare the Air Campaign	\$25.0						\$25.0			
Performance Monitoring	\$2.8						\$2.8			
TLC/HIP (2)	\$189.2						\$189.2			
Subtotal System Programs	\$699.0						\$699.0			
Residual for County Programs	\$5,939.1		\$89.1				\$1,669.0	\$2,858.0	\$1,263.0	\$60.0
	\$2,688.9									
COUNTY PROGRAMS Fully fund MTS Streets and Roads Pavement Shortfall (3)	\$129.0						\$129.0			
Non MTS pavement/Non-pavement (4)										
Fund Transit Capital Shortfall-100% (5)	\$1,066.0		\$89.1				\$731.9	\$245.0		
Local streets and roads bridge rehab (4)										
TLC (1/3 return of regional program increase)	\$137.5						\$137.5			
CMA Planning Funds	\$50.1						\$50.1			
Subtotal County Programs	\$1,382.6		\$89.1				\$1,048.5	\$245.0		
TOTAL REGIONAL TAKEDOWNS	' /	\$1,266.0	\$227.0	\$176.0	\$50.0	\$360.0	\$1,747.4	\$245.0		
Residual Funding Available	\$4,556.5						\$620.6	\$2,613.0	\$1,263.0	\$60.0

^{*} Contra Costa County to pay its estimated share with Transportation Fund for Clean Air county program funds.

1.2 Transit Operator Financial Analysis

As part of the RTP planning effort, MTC analyzes how much funding is needed to maintain and operate existing transit services. This analysis starts with the development of 25-year transit financial information based on revenue projections developed by MTC for all federal, state, and local funding sources, and transit operator developed projections of dedicated revenue sources that they control. Projected funding is assigned to transit operators based on their eligibility for each fund source and MTC policy.

Costs, both capital and operating, are based on transit operator Short Range Transit Plans (SRTPs) prepared pursuant to federal requirements. In most instances these are ten-year plans covering the period 2000-2009; however, some operators elected to prepare 25-year plans. For those operators that elected to prepare 10 year SRTPs, MTC projected capital and operating costs through FY 2025/2026. These cost estimates were based on replacement schedules for revenue vehicles, using standard "useful life" criteria for each vehicle type. MTC also estimated additional asset replacement requirements, operating costs and fare revenues, in cooperation with the transit operators. Where the operators did not provide detailed costs for years 11-25, capital replacement costs may be understated.

All revenues and costs are expressed in 2001 dollars. Transit operating costs and revenues and replacement requirements are for the current service levels and service levels for projects currently under construction ("baseline" service) provided by each operator projected through 2026. For each major operator capital surplus / shortfalls are shown prior to the inclusion of proposed RTP Track 1 funding, followed by the proposed RTP Track 1 funding and any remaining shortfall. Summary information for smaller operators follows.

Funding sources derived through sales taxes (i.e., TDA and 1/2 cent sales tax funds) were projected based on projections developed by the Center for the Continuing Study of the California Economy. Federal funding projections include increased authorization levels contained in "TEA-21" federal reauthorization legislation. Transit operator fare revenue projections assume that fare revenues will at least keep pace with inflation, except where transit operator policy proposes an alternative assumption.

Financial analyses are included for:

Alameda Contra Costa Transit District (AC Transit)
Bay Area Rapid Transit (BART)
Caltrain
Central Contra Costa Transit District (CCCTA)
City of Vallejo Transit
Golden Gate Transit
Livermore Amador Valley Transit Authority
San Mateo County Transit (SamTrans)
San Francisco Municipal Railway (MUNI)
Santa Clara Valley Transportation Authority (SCVTA)
Small Operators

2001 Regional Transportation Plan 25-Year Baseline* Transit Operator Summary:

Capital and Operating Surplus/(Deficit) (2001\$ in 000's)

OPERATIONS CAPITAL

Operator	Operations Funding	Operations Expenses	Operating Deficit	Capital Funding	Capital Costs	Capital Surplus/ (Shortfall)	Proposed 2001 RTP Track 1 Funding	Remaining Capital Surplus/ (Deficit)
AC Transit	\$ 5,791,600	\$ 5,828,300*	\$ (36,700)	\$ 1,081,500	\$ 1,269,900	\$ (188,400)	\$ 188,400*	\$ -
BART	\$11,385,400		\$ -		\$ 5,867,900	\$ (472,800)	\$ 472,800*	\$ -
Caltrain	\$ 1,452,500	\$ 1,452,500*	\$ -	\$ 802,300	\$ 946,100	\$ (143,800)	\$ 143,800*	\$ -
CCCTA	\$ 614,100	\$ 614,400	\$ -	\$ 284,400	\$ 127,800	\$ 156,600	\$ -	\$ 156,600
GGBHTD	\$ 1,613,300	\$ 1,613,300	\$ -	\$ 404,500	\$ 552,200	\$ (147,700)	\$ 147,700	\$ -
LAVTA	\$ 222,200	\$ 222,200	\$ -	\$ 152,100	\$ 82,600	\$ 69,500	\$ -	\$ 69,500
Muni	\$10,625,100	\$10,625,100*	\$ -	\$ 3,692,500	\$ 3,792,600	\$ (100,100)	\$ 100,100*	\$ -
SamTrans	\$ 2,263,400	\$ 2,263,400	\$ -	\$ 1,059,700	\$ 630,600	\$ 429,100	\$ -	\$ 429,100
SCVTA	\$ 8,630,200	\$ 8,630,200*	\$ -	\$ 4,925,300	\$ 2,113,300	\$ 2,812,000	\$ -	\$2,812,000*
Vallejo	\$ 449,200	\$ 468,400	\$ (19,200)	\$ 63,100	\$ 103,100	\$ (40,000)	\$ 40,000	\$ -
Small Operators	\$ 1,101,900	\$ 834,500	\$ -	\$ 753,400	\$ 347,600	\$ 405,800	\$ -	\$ 405,800
Regional Total	\$44,204,800	\$44,148,900	\$ (55,900)	\$18,613,900	\$15,833,700	\$2,780,200	\$1,092,800	\$3,873,000

^{*} Baseline includes only those services in operation, under construction or that have full funding commitments (e.g. BART/SFO, Muni 3rd Street/Bayview Hunters Point, SCVTA Tasman East/East Valley/Vasona/Capitol LRT extensions). Potential Regional Transit Expansion Program projects (e.g. BART/San Jose, Muni Central Subway, Caltrain Express/SF Downtown Extension and AC rapid bus projects) are not included in the Baseline costs and revenues.

BASELINE TRANSIT CAPITAL FUNDS BY OPERATOR*

(25 year total, 2001\$ in thousands)

			(==)		σ τφ πτ αποασαι						
CAPITAL FUNDS/OPERATOR	AC Transit	BART	Caltrain	CCCTA	Golden Gate	LAVTA	Muni	SamTrans	Vallejo	VTA	Small Operators
Local Funds (e.g. district/property											
taxes, general fund, fares)	\$532,100	\$13,900			\$142,500	\$500	\$1,048,200	\$658,700		\$3,096,500	\$71,600
Statutory Formula											
TDA				\$216,000		\$115,200		\$234,100	\$6,000	\$1,190,400	\$582,200
STA Revenue based			\$48,700								
AB 1107 (75% BART)		\$4,474,700									
MTC											
FTA 5307	\$424,400			\$56,300			\$1,223,000				
FTA 5309 Fixed Guideway		\$606,000	\$412,400		\$12,200		\$683,300		\$2,200	\$81,300	
FTA 5309 New Starts*											
TDA Article 4.5	\$3,500	\$5,900									
STA Population											\$9,600
AB 1107 (25%Muni/AC Transit)							\$668,600				
Bridge tolls (AB 664)	\$88,900	\$46,100		\$12,100		\$5,400	\$65,500	\$4,100	\$9,000		\$2,300
Bridge tolls (RM 1)*											
Bridge tolls (5%)											
STP/CMAQ Programmed		\$11,100	\$3,700		\$800		\$3,900				
Subtotal Revenues	\$1,081,500	\$5,395,100	\$802,300	\$284,400	\$404,500	\$152,100	\$3,692,500	\$1,059,700	\$63,100	\$4,925,300	\$753,400
Total Capital Replacement Costs	\$1,269,900	\$5,867,900	\$946,100	\$127,800	\$552,200	\$82,600	\$3,792,600	\$630,600	\$103,100	\$2,113,300	\$347,600
RTP Surplus/(Shortfall)	-\$188,400	-\$472,800	-\$143,800	\$156,600	-\$147,700	\$69,500	-\$100,100	\$429,100	-\$40,000	\$2,812,000	\$405,800
RTP Track 1 Funds	\$188,400	\$472,800	\$143,800	\$0	\$147,700	\$0	\$100,100	\$0	\$40,000	\$0	\$0
Remaining Surplus/(Shortfall)	\$0	\$0	\$0	\$156,600	\$0	\$69,500	\$0	\$429,100	\$0	\$2,812,000	\$405,800

^{*} Excludes RTEP project funding

BASELINE TRANSIT OPERATING AND MAINTENANCE FUNDS BY OPERATOR* (25 year total, 2001\$ in thousands)

											Small
OPERATING FUNDS/OPERATOR	AC Transit	BART	Caltrain	CCCTA	Golden Gate	LAVTA	Muni	SamTrans	Vallejo	VTA	Operators
Local Funds (e.g. district/property taxes, general fund, fares)	\$2,510,000	¢9 402 200	¢1 452 500	¢100 000	\$1 060 000	\$64.100	¢0 702 000	¢1 242 200	¢270 600	¢6 444 200	\$254,600
Statutory Formula	φ2,310,000	φο,493,200	\$1,432,300	φ 199,900	\$1,000,000	Φ0 4 , 100	\$8,703,800	\$1,343,200	\$279,000	Φ0,444 ,200	\$234,000
TDA	\$1,936,800	\$31,400		\$377,600	\$487,800	\$139,100	\$1,044,500	\$787,800	\$134,600	\$1,868,500	\$670,100
STA Revenue based	\$141,500			\$5,900							
AB 1107 (75% BART)		\$2,566,300									
MTC					-						
FTA 5307											\$49,600
FTA 5309 Fixed Guideway											
FTA 5309 New Starts*											
TDA Article 4.5	\$78,200	\$31,200				\$3,600		\$59,800		\$168,600	
STA Population				\$30,700	\$2,000	\$14,600			\$7,500		\$102,600
,	\$1,125,100						\$530,000				
Bridge tolls (AB 664)											
Bridge tolls (RM 1)*											
Bridge tolls (5%)									\$23,600		
STP/CMAQ Programmed											
Subtotal Revenues	\$5,791,600	\$11,385,400	\$1,452,500	\$614,100	\$1,613,300	\$222,200	\$10,625,100	\$2,263,400	\$449,200	\$8,630,200	\$1,101,900
Total Operating Costs	\$5,828,300	\$11,385,400	\$1,452,500	\$614,100	\$1,613,300	\$222,200	\$10,625,100	\$2,263,400	\$468,400	\$8,630,200	\$1,101,900
RTP Surplus/(Shortfall)	-\$36,700	\$0	\$0	\$0	\$0	\$0	\$0	\$0	-\$19,200	\$0	\$0
RTP Track 1 Funds	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Remaining Surplus/(Shortfall)	-\$36,700	\$0	\$0	\$0	\$0	\$0	\$0	\$0	-\$19,200	\$0	\$0

^{*} Excludes RTEP project funding

Alameda Contra Costa Transit District

2001 Regional Transportation Plan 25-Year Baseline Transit Operator Summary Capital and Operating Surplus/(Deficit) (\$ in 000s)

Operations Funding	Operations Expenses	Operations Deficit	Capital Funding	Capital Costs	Capital Surplus (Shortfall)
\$5,791,600 Proposed Tra	\$5,828,300 ck 1 funding	(\$ 36,700)	\$ 1,081,500 \$ 188,400	\$1,269,900	(\$188,400) \$ -0-

Service Profile

The Alameda Contra Costa Transit District (AC Transit) is the largest provider of bus service in the East Bay, and the primary provider of bus transit to the traditional urban core and the most populous areas of both Alameda and Contra Costa counties. AC Transit operates two primary services. One primary service area includes 78 East Bay local routes, 3 East Bay express routes, 17 commute routes, and 5 community destination-based services along a linear strip on the eastern shore of the San Francisco Bay from the city of Richmond in the north, to the city of Fremont in the south. The area is primary urban and includes the cities of Alameda, Berkeley, Hayward, Oakland and San Leandro. The second primary service area consists of the 37 Trans-bay routes that connect major East Bay population centers to the city of San Francisco via the San Francisco/Oakland Bay Bridge. AC transit provides the most service during the weekday am peak period when almost 650 vehicles are in revenue service to meet scheduled service demand. AC Transit is also a participant in the East Bay Consortium that provides ADA services to East Bay residents.

Financial Profile

Operating Budget

AC Transit is primarily funded with fares and other operating revenue (28%), TDA funds (24%), property taxes (18%), (AB 1107) sales tax funds (14%), STA Funds (3%), and local transportation sales taxes in Alameda and Contra Costa Counties (11%). The remaining funding comes from BART transfer and ADA paratransit. The adult base cash fare is \$1.35 and a monthly pass costs \$49.00. Transbay adult base cash fares are \$2.50 and a monthly pass is \$80.00. Transfers cost 25 cents.

Capital Budget

Major outside capital fund sources for AC Transit include Federal Transit Administration (FTA) funds, toll bridge funds, and State Transit Assistance (STA) funds.

AC Transit RTP Issues

Overview and Service Element

Over the 25 year period of the 2001 RTP, AC Transit is expected to remain a major provider of both local and Transbay bus service in the East Bay. Overall, AC Transit is projected to remain very much as it is today. A modest increase over current services that will bring AC Transit up to 1995 service levels is included in the Baseline. MTC's recently adopted Regional Transit Expansion Program includes expansion of AC Transit bus service in the Oakland/San Leandro and Hesperian/Foothill and MacArthur corridors but these cost and revenues are not included in the RTP Baseline projection.

Financial Element

The 2001 RTP projects that AC transit's major fund sources will experience steady growth rates over the 25-year period. The base fares are projected to increase with inflation and total fare revenues are projected to increase modestly with ridership increases. Except where noted above, AC Transit's operating revenue mix is projected to be largely unchanged during the RTP period.

Operating Budget

For the purposes of the RTP, all available operating funds are identified for operating purposes. AC Transit would have to adjust service to avoid a relatively small operating deficit (\$ 36.7 million) over the first 10 years of the RTP. This is the result of increasing service levels back to 1995 levels and applying all available operations funding, including additional funds provided by Alameda County Measure B. Growth in taxable sales-based revenues is projected to be sufficient to eliminate any operating deficits beginning in 2010.

Capital Budget

Major outside capital fund sources for AC Transit include Federal Transit Administration (FTA) funds, AB 664 toll bridge funds, local sales tax and local property tax funds. These fund sources are allocated to AC Transit for bus replacement projects and other capital replacement and enhancement projects. State TCRP funds are earmarked to fund the Fuel Cell Bus demonstration project.

The major sources of capital replacement needs are:

•	Bus Replacement	72%
•	Paratransit Van Replacement	3%
•	Capitalized Maintenance (tires, engines)	8%
•	Information Systems	3%
•	Facility Renovation & Replacement	8%

Bay Area Rapid Transit (BART)

2001 Regional Transportation Plan 25-Year Baseline Transit Operator Summary Capital and Operating Surplus/(Deficit) (\$ in 000s)

Operations Funding	Operations Expenses	Operations Deficit	Capital Funding	Capital Costs	Capital Surplus (Shortfall)
\$11,385,400 Proposed Track	\$11,385,400 k 1 funding	\$ <i>—</i>	\$5,395,100 \$ 472,800	\$5,867,900	(\$472,800) \$ -0-

Service Profile

BART is the primary provider of regional rail transit service in the East Bay with service to San Francisco, and Colma in San Mateo County and an extension to San Francisco International Airport scheduled to open in 2002. BART provides this service with a fleet of 669 rail cars over a 95 mile system serving 39 stations in Alameda, Contra Costa, San Francisco, and San Mateo counties. The maximum number of online trains is currently 57 and this is scheduled to increase to 65 with the completion of the SFO Airport/Millbrae extension. Transbay service operates at a maximum of 2 minutes 30 seconds between trains and this is scheduled to decrease to 2 minutes in order to increase Transbay Tube throughput from 21 trains per hour to 26. Service is provided on a seven day basis from 4:00 a.m. to 1:30 a.m. during the work week with slightly reduced hours on Saturday and Sunday. BART is also a participant in the East Bay Paratransit Consortium that provides ADA paratransit service in Alameda and Contra Costa counties.

Financial Profile

Operating Budget

BART is currently funded with fares (57%), AB 1107 sales tax funds (37%), BART property tax (4%) and various local funds from Alameda and Contra Costa counties (2%). BART employs a zone fare system based on distance traveled with a surcharge for trips across the Bay and to San Mateo County. Fares range from \$1.10 to \$4.70 per trip and transfers are available to connecting transit services.

Capital Budget

Primary capital funding sources for BART include Federal Transit Administration (FTA) funds, toll bridge funds, and STIP funds. In addition, San Mateo County has contributed substantial capital funding for extending BART to the San Francisco International Airport.

BART RTP Issues

Overview and Service Element

BART expects current ridership to increase 40 percent by 2008 and continuing beyond 2008 commensurate with population and employment growth in the Bay Area. BART is currently constructing an extension to SFO/Millbrae in San Mateo County that is included in the 25-year RTP baseline financial projections. MTC's recently adopted Regional Transit Expansion Program includes BART extensions to the Oakland airport and to Santa Clara County but these cost and revenues are not included in the RTP Baseline projection.

Financial Element

The 2001 RTP projects that BART's primary fund sources will continue to grow at steady rates over the 25-year period. Base fares are projected to increase with inflation and total fare revenues are projected to increase significantly as ridership continues as mentioned above.

Operating Budget

BART is projected to have sufficient operating revenues over the 25-year period to fully fund operating costs. The BART RTP Baseline farebox recovery ratio is 65% in 2001, and this is projected to increase to 73% by 2026 due to additional fare revenues from fare increases and ridership growth.

Capital Budget

Major external capital fund sources for BART include Federal Transit Administration (FTA) funds, AB 664, and Regional Measure 1 bridge toll funds. In addition, STIP funds have in the past provided BART with significant rail extension funding, however these funds would depend on a future project being included in the RTP.

The RTP projects that BART will incur a \$473 million dollar shortfall prior to proposed RTP Track 1 funding, due largely to the need to replace their A/B car fleet in 2017 and 2018 and to rehab their C car fleet in 2013-2017. This shortfall could be financed in part by issuing bonds backed by the BART sales tax.

BART's major capital replacement needs are:

•	A/B Car Replacement	35%
•	C Car Rehab	8%
•	Recurring Capital Replacement Requirements	12%
•	Cyclical Capital Replacement Requirements	38%

In addition to the above projects, BART also has an estimated \$850 million seismic retrofit program of its overhead track structures. Caltrans intends to provide grants totaling about \$240 million for track structures that cross state highway. There are no identified funds for the remaining \$610 million; one possible revenue source may be a property tax assessment that would finance general obligation bonds.

Caltrain

2001 Regional Transportation Plan 25-Year Baseline Transit Operator Summary Capital and Operating Surplus/(Deficit) (\$ in 000s)

Operations Funding	Operations Expenses	Operations Deficit	Capital Funding	Capital Costs	Capital Surplus (Shortfall)
\$1,452,500 Proposed Trac	\$1,452,500 k 1 funding	\$ <i>—</i>	\$802,300 \$437,800	\$946,100	(\$143,800) \$ -0-

Service Profile

Caltrain provides commuter rail service between San Francisco and the Peninsula extending south as far as Gilroy in Santa Clara County, a distance of 77 miles. Service is 80 trains per day operated by AMTRAK under contract to the Peninsula Corridor Joint Powers Board, which has representatives from San Francisco, San Mateo and Santa Clara counties. MTC's recently adopted Regional Transit Expansion Program included funds for extension of service to Downtown San Francisco and electrification of service between Gilroy and San Francisco but these costs and revenues are not included in the RTP Baseline projections.

In 2000, Caltrain carried 8.6 million riders. Caltrain is the primary inter county transit service on the Peninsula connecting San Francisco with San Jose and serving all of the intervening Peninsula suburban communities. Caltrain provides most of its service during the weekday morning and evening commute period.

Financial Profile

Operating Budget

Caltrain is primarily funded with fares (36%), and funding contributions from San Francisco (9%), San Mateo County (25%), and Santa Clara County (24%). Caltrain has a zone fare system and issues monthly passes based on zone origin and destination.

Capital Budget

Primary external capital fund sources for Caltrain include Federal Transit Administration (FTA) funds, AB 664 toll bridge revenues, county sales tax revenues, Regional Measure 1 toll bridge revenues, and STIP funds.

Caltrain RTP Issues

Over the 25-year period of the 2001 RTP, Caltrain is expected to continue to serve the growing Peninsula suburban service area. The RTP Baseline projections assumes a continuation of Caltrain's 80 train per day baseline level of service (8 of these trains extend to Gilroy during commute hours), while Caltrain's planned Phase 1 express service expansion will increase the number of weekday trains to 110. This proposed expansion is not included in the RTP Baseline projections.

Financial Element

The 2001 RTP projects that Caltrain's primary fund sources will be sufficient to continue to operate the existing level of service. Any expansion of this service would have to be contingent on additional funding contributions from the Peninsula Corridor Joint Powers Board members. Caltrain projects their fares will keep pace with inflation and assumes that ridership will increase significantly between now and 2026. RTP Baseline farebox recovery ratio is assumed to remain constant at 36%.

Operating Budget

Caltrain is not expected to experience any operating deficit over the 25-year RTP period assuming the current 80 train per day level of service. Caltrain base fares are \$1.25-\$6.75 with off peak discounts of \$1.00 to \$4.00. Monthly passes cost \$30.50 to \$177.25.

Capital Budget

Major outside capital fund sources for Caltrain include Federal Transit Administration (FTA) funds, STIP funds, and bridge toll revenues. Caltrain is expected to incur a substantial \$144 million capital shortfall prior to proposed RTP Track 1 funding. (Note that some \$140 million in federal rail modernization funds allocated to Caltrain in MTC Resolution 1876 have been included in the capital funding.) Additional replacement requirements that remain unfunded account for the remaining portion of the capital shortfall.

The main sources of capital replacement needs for Caltrain are:

•	Passenger Car Replacement/Rehabilitation	29%
•	Locomotive Replacement/Rebuild	6%
•	System Rehabilitation	65%

Central Contra Costa Transit District (CCCTA)

2001 Regional Transportation Plan 25-Year Baseline Transit Operator Summary Capital and Operating Surplus/(Deficit) (\$ in 000s)

Operations Funding	Operations Expenses	Operations Deficit	Capital Funding	Capital Costs	Capital Surplus (Shortfall)
\$614,100	\$614,100	\$	\$284,400	\$127,800	\$156,600

Service Profile

The Central Contra Costa Transit District provides transit service in a 180 square mile area of suburbs in Contra Costa County that includes the cities of Concord, Walnut Creek, Lafayette, Pleasant Hill, San Ramon, Martinez, Orinda, Danville, Moraga and the adjacent unincorporated area of Contra Costa County. Service is provided on 28 routes, five of which are commuter routes and two are contract services to the Bishop Ranch Business Park in San Ramon and the Galaxy Plaza Business Park in Concord. CCCTA provides primary feeder service to BART stations in Contra Costa County and the new Dublin/Pleasanton BART station in Alameda County. CCCTA also provides ADA paratransit service by contracting with the private sector. CCCTA has an active bus fleet of 160 vehicles including 112 motor buses and 48 vans.

Financial Profile

Operating Budget

CCCTA is primarily funded with fares (20%), TDA funds (61%), STA funds (6%), and local transportation sales taxes in Contra Costa County (6%). Remaining funds are from non-transportation funding sources (7%). The adult cash fare is \$1.25.

Capital Budget

Primary capital funding sources for CCCTA include Federal Transit Administration (FTA) funds, AB 664 toll bridge funds, and State Transit Assistance (STA) funds. CCCTA is not projected to receive any STIP funding for the Baseline.

CCCTA RTP Issues

Overview and Service Element

Over the 25-year period of the 2001 RTP, CCCTA ridership is anticipated to grow significantly based on the growing suburban areas of central Contra Costa County. The service levels projected in the RTP Baseline, however, only maintain the existing level of service. The CCCTA short range transit plan projects a modest expansion of services, which could be funded from the indicated RTP surplus.

Financial Element

The 2001 RTP projects significant growth in fund sources that are derived from the retail sales tax (TDA) in Contra Costa County. However, this is primarily offset by the assumed sunset of the Contra Costa ½¢ sales tax in 2008. CCCTA projects fares to keep pace with inflation and projected growth in suburban population is expected to contribute to parallel gains in ridership.

Operating Budget

CCCTA is not expected to experience any operating deficit over the 25-year RTP period assuming the current levels of service. Farebox recovery is projected to remain at 20% over the 25-year RTP.

Capital Budget

Primary outside capital fund sources for CCCTA include Federal Transit Administration (FTA) funds, and AB 664 toll bridge funds. These funds are allocated to CCCTA for bus replacement and other replacement and service enhancement capital improvements. CCCTA is projected to incur a \$156,600 million dollar capital surplus over the 25-year RTP; however, any service expansion would reduce this amount based on the farebox recovery of 20% and the need to purchase expansion motor coaches and/or vans.

Major source of capital rehabilitation needs are:

•	Replacement Buses	72%
•	Replacement Vans	18%
•	Non-Revenue Vehicle Replacement	3%
•	Facility Replacement/Rehab	2%
•	Equipment Replacement/Rehab	5%

City of Vallejo Transit

2001 Regional Transportation Plan 25-Year Baseline Transit Operator Summary Capital and Operating Surplus/(Deficit) (\$ in 000s)

Operations Funding	Operations Expenses	Operations Deficit	Capital Funding	Capital Costs	Capital Surplus (Shortfall)
\$449,200 Proposed Track	468,400 I funding	(\$19,200)	\$63,100 \$40,000	\$103,100	(\$40,000) \$ -0-

Service Profile

The City of Vallejo Transit provides transit service to the Vallejo urbanized area of about 200,000 population including Vallejo, the largest city in Solano County. It provides local bus service with a fleet of 52 vehicles and express service (BartLink) across the Carquinez Bridge to the El Cerrito Del Norte BART station.

Local transit service is provided by a total of 25 routes including 15 local, 6 feeder routes and 4 interregional routes between Vallejo and Fairfield/Suisun City and to the El Cerrito Del Norte BART station. Vallejo Transit also operates high speed ferry service to San Francisco under contract with the Blue and Gold Fleet, a corporate subsidiary of Pier 39 in San Francisco. The service is provided by a fleet of 3 vessels. Vallejo Transit also provides paratransit service with a 10 vehicle fleet and subsidizes a half fare taxi program for the elderly.

Financial Profile

Operating Budget

Vallejo Transit is primarily funded with fares (59%), TDA funds (24%), STA funds (3%) and 5% toll bridge revenues from the Northern Bridge Group (9%). The zone cash fare varies from \$1.25 to \$4.75. A monthly pass for local service is priced at \$34 and a regional route pass costs \$69 to \$79.

Capital Budget

Major external capital fund sources for Vallejo Transit include Federal Transit Administration (FTA) funds, AB 664 toll bridge funds, and State Transit Assistance (STA) funds.

Vallejo Transit RTP Issues

Overview and Service Element

Over the 25 year period of the 2001 RTP, Vallejo Transit is anticipated to grow significantly as Solano County continues to develop and demand for regional transit service increases. The RTP projects current Baseline service to continue, but Vallejo also has proposed some expansion of service beyond current levels with the proposed addition of two ferry boats. This has not been included in the RTP Baseline projection.

Financial Element

The 2001 RTP projects that Vallejo Transit's primary fund sources will experience steady growth over the 25 year period as a result of projected growth in taxable sales in Solano County. It is also assumed that fares will keep pace with inflation and total fare revenues are projected to increase in real terms as ridership increases. Vallejo Transit currently operates at a farebox recovery ratio of 60% and this is projected by Vallejo Transit to increase eventually to 72%.

Operating Budget

Although we project a cumulative \$19 million operating shortfall, it is manageable and Vallejo Transit is projected to be able to fund its existing transit service levels through 2026. However, any expansion would require additional funds be made available. It is also possible that Vallejo transit's projected farebox recovery growth is too optimistic and a more significant operating deficit could occur if the ridership growth fails to materialize as projected.

Capital Budget

Primary capital fund sources for Vallejo Transit include Federal Transit Administration (FTA) funds and AB 664 toll bridge funds. Vallejo Transit is also eligible for both federal and state fixed guideway funds that can be used for ferry capital improvements. The RTP allocates these funds to Vallejo for capital purposes based on a regional assessment of replacement requirements and service enhancement projects. Addition of new services has not been included. The RTP projects Vallejo Transit to have a \$40 million dollar shortfall over the 25-year RTP period; however, asset replacement requirements in the out years are likely understated since Vallejo Transit did not provide detailed capital replacement needs for these years. While major rolling stock capital replacement needs are accounted for during this period, historically operators incur other capital costs for support facilities such as maintenance equipment, facilities and non-revenue equipment.

Major sources of capital replacement needs are:

•	Replacement Buses	50%
•	Replacement Vans	3%
•	Capitalized Transit Maintenance	29%

Golden Gate Transit

2001 Regional Transportation Plan 25-Year Baseline Transit Operator Summary Capital and Operating Surplus/(Deficit) (\$ in 000s)

Operations Funding	Operations Expenses	Operations Deficit	Capital Funding	Capital Costs	Capital Surplus (Shortfall)
\$1,613,300 Proposed Track	\$1,613,300 x 1 funding	\$ <i>—</i>	\$404,500 \$147,700	\$552,200	(\$147,700) \$ -0-

Service Profile

Golden Gate Transit provides local service in Marin County, inter-county service between Sonoma and Marin counties and the East Bay, and peak period and all-day transbay commute service. Golden Gate provides this service with a fleet of 270 buses and leases 11 additional buses to privately contracted operators of Club Bus commuter services. Golden Gate also operates a fleet of 4 ferry boats between Marin County and the San Francisco Ferry Terminal and contracts for paratransit through an agreement with the Marin County Transit District.

Financial Profile

Operating Budget

Golden Gate Transit is currently funded with fares (33%), TDA funds (921 Golden Gate Bridge toll revenues (39%), and State Transit Assistance (7%). The adult base cash fare ranges from \$1.25 to \$4.50 depending on origin and destination zone. Discounts are available to seniors and youth and transfers are free. The price of a 20 ride ticket varies from \$25 to \$72, and an unlimited monthly pass is available for inter operator travel within Sonoma County for \$70.

Capital Budget

Major external capital fund sources for Golden Gate are primarily Transit Federal Transit Administration (FTA) funds. Golden Gate is also eligible for STIP funds but they are not projected to be a significant source of capital funds for RTP Baseline capital replacement. Matching funds for federal grants is primarily TDA and/or Golden Gate Bridge toll revenues.

Golden Gate Transit RTP Issues

Overview and Service Element

Over the 25 year period of the 2001 RTP, Golden Gate Transit is anticipated to continue to provide the current level of service with proposed modest restructuring and increases as warranted by growth in service area demand and continued improvements in efficiency and effectiveness. No expansion of ferry service is projected.

Financial Element

The 2001 RTP projects that Golden Gate will incur a capital deficit of \$148 million dollars by 2026, prior to proposed RTP Track 1 funding. This assumes that fares continue to increase with inflation. It also assumes Golden Gate Bridge toll revenue transfers to transit limited to \$33 million annually beginning in 2002, consistent with GGBHTD policy; this policy reserves some toll revenues for seismic retrofit of the Golden Gate Bridge. Toll revenues are also projected to grow about 0.7% per year due to increased bridge traffic. Golden Gate Transit operates with a 33% farebox recovery ratio, and this is projected to remain constant.

Operating Budget

Golden Gate should be able to continue to operate at existing service levels without incurring any significant deficits over the next 25 years

Capital Budget

Primary sources of capital funding for Golden Gate Transit include Federal Transit Administration (FTA) funds and Golden Gate Bridge toll revenues. Golden Gate Transit is also eligible for federal and state fixed guideway funding for its ferry boats and facilities. The RTP allocates regional funds to Golden Gate for capital purposes based on a regional assessment of replacement requirements and service enhancements. Expansion projects, primarily paratransit vans have not been included in the Baseline RTP.

The capital shortfall indicates that absent any increases in fares beyond inflation-related increases and/or future increases in toll revenues to transit, Golden Gate cannot adequately provide for its capital replacement requirements over the 25 year RTP period.

Major sources of capital replacement needs include:

Bus Replacement	47%
Ferry Replacemen	4%
Facilities and Equipment	48%
Paratransit Vans	1%
	Ferry Replacemen Facilities and Equipment

Livermore Amador Valley Transit Authority (LAVTA)

2001 Regional Transportation Plan 25-Year Baseline Transit Operator Summary Capital and Operating Surplus/(Deficit) (\$ in 000s)

Operations Funding	Operations Expenses	Operations Deficit	Capital Funding	Capital Costs	Capital Surplus (Shortfall)
\$222,200	\$222,200	\$ —	\$152,100	\$82,600	\$69,500

Service Profile

The Livermore Amador Valley Transit Authority (LAVTA) provides transit service in eastern Alameda County serving the communities of Pleasanton, Dublin, Livermore and the adjacent unincorporated area. The service area is 40 square miles with a population of 155,000. Service is provided on 12 routes with a fleet of 71 buses and a fleet of 18 vans providing dial-a-ride ADA service. Fixed route service is primarily provided during weekdays with only 7 routes providing service on Saturdays and one route on Sundays.

Financial Profile

Operating Budget

LAVTA is primarily funded from fares (22%), TDA (65%), and STA (7%). Additional TDA and STA funding is provided by BART (4%) and the Alameda County ½¢ sales tax (1%). The fixed route cash fare is \$1.00 and a 40-ticket pass costs \$24. Transfers are free.

Capital Budget

Primary sources of capital funding for LAVTA include Federal Transit Administration (FTA) funds, AB 664 toll bridge funds, and State Transit Assistance (STA) funds.

LAVTA RTP Issues

Overview and Service Element

Over the 25-year period of the 2001 RTP, LAVTA is expected to increase its service in response to projected growth in its service area. Implementation of a DART (Direct Access Responsive Transit) program began in 1997. This service, which replaces mid-day fixed route service is designed to provide efficient service for passengers making connections to regional bus and rail services.

Financial Element

The 2001 RTP projects that LAVTA will have sufficient funds to operate its existing service commitments due to projected steady growth in TDA funds that should result from growth in taxable sales in its service area. Alameda County Measure B funds will augment these revenues. Fares are projected to increase in response to inflation, and this is anticipated to be sufficient to maintain LAVTA's current 22% farebox recovery ratio through 2026.

Operating Budget

LAVTA is not projected to incur any operating deficit as a result of operating its current level of service. This is primarily due to projected increases in TDA funding and a projected robust fare recovery ratio growth.

Capital Budget

Primary external capital funding to LAVTA is provided by Federal Transit Administration (FTA) funds, and AB664 bridge toll revenues. In addition, LAVTA has been able to use part of its TDA for capital purposes. The RTP projects LAVTA will accumulate a \$70 million dollar capital surplus by 2026; however, asset replacement requirements in the out years are likely understated since LAVTA did not provide detailed capital replacement needs for these years. While major rolling stock capital replacement needs are accounted for during this period, operators historically incur other capital costs for support facilities such as maintenance equipment, facilities and non-revenue equipment.

The main sources of capital rehabilitation needs (which are fully funded) include:

•	Replacement Buses	74%
•	Replacement Vans	10%
•	Miscellaneous Facility Replacement	16%

San Francisco Municipal Railway (Muni)

2001 Regional Transportation Plan 25-Year Baseline Transit Operator Summary Capital and Operating Surplus/(Deficit) (\$ in 000s)

Operations Funding	Operations Expenses	Operations Deficit	Capital Funding	Capital Costs	Capital Surplus (Shortfall)
\$10,625,100 Proposed Track	\$10,625,100 k 1 funding	\$ —	\$3,692,500 \$ 100,100	\$3,792,600	(\$100,100) \$ -0-

Service Profile

Muni provides transit service to the City and County of San Francisco through an extensive network of 80 lines and a fleet of 987 revenue vehicles that carries 217 million passengers per year, the largest ridership among the Bay Area's transit operators. Muni provides service using four modes: bus, trolley, light rail vehicles, and cable car. In addition, a small fleet of historic trolley cars operates on Market Street. Muni provides 24 hour service on 12 routes, weekday service on 80 routes, and weekend service at 65 percent of regular weekday revenue service. San Francisco also contracts to provide ADA paratransit service through a paratransit broker.

Financial Profile

Operating Budget

Muni is primarily funded with fares (24%), San Francisco City and County General Funds and parking revenue (47%), TDA (9%) and AB 1107 ½¢ sales tax funds (7%). The remaining funding comes from the San Francisco Transportation Authority ½¢ sales tax funds, transfers and miscellaneous local funding sources (13%). The adult base cash fare is \$1.00 and Muni offers monthly passes priced at \$35.

Capital Budget

Primary external capital fund sources for Muni include Federal Transit Administration (FTA) funds, toll bridge funds, San Francisco Transportation Authority ½¢ sales tax funds, and State Transit Assistance (STA) funds. Transportation Authority funding is assumed to sunset in 2010 and is not renewed for purposes of this analysis. Muni has also received significant state (STIP) funding for fixed guideway capital improvements. State TCRP funds are earmarked for Muni 3rd Street Phase 2 expansion and not available for Baseline capital replacement.

MUNI RTP Issues

Overview and Service Element

Over the 25 year period of the 2001 RTP, Muni is expected to increase revenue service by 2 to 3 percent to restore service to 1990 levels and meet future demand. Muni is currently extending its light rail service from the Caltrain 4th/Townsend station via Third Street to the Bayshore Caltrain station. MTC's recently adopted Regional Transit Expansion Program includes extending the 3rd Street light rail line north to Chinatown (Central Subway project); the costs and revenues for this project are not included in these RTP baseline projections.

Financial Element

The 2001 RTP projects that Muni's major fund sources, including substantial parking revenues, will experience steady growth rates over the 25 year period with the exception of the Authority's ½¢ sales tax which will sunset in 2010. Base fares are projected to keep pace with inflation and total fare revenues are projected to increase proportionally based on very modest ridership growth indicated above.

Operating Budget

The RTP projects Muni operations to be fully funded over the 25 year RTP period based on existing sources of operating funding and sunset of the San Francisco Transportation Authority ½¢ sales tax.

Capital Budget

Major external capital fund sources for Muni include Federal Transit Administration (FTA) funds, AB 664 and Regional Measure 1 bridge toll funds, and San Francisco Transportation Authority ½¢ sales tax revenues. Muni also is eligible to apply for STIP flexible funds for rail improvements but these flexible funds have not been assumed in the RTP Baseline analysis for Muni or for other operators. The RTP projects a \$100 million 25 year shortfall for Muni prior to proposed RTP Track 1 funding.

Major sources of capital replacement needs are:

•	LRV Replacement	21%
•	Trolley Coach Replacement	13%
•	Motor Coach Replacement	20%
•	Infrastructure Replacements	21%
•	Non-revenue Vehicle Replacement	1%
•	Facilities Preservation and Improvement	7%

San Mateo County Transit (SamTrans)

2001 Regional Transportation Plan 25-Year Baseline Transit Operator Summary Capital and Operating Surplus/(Deficit) (\$ in 000s)

Operations Funding	Operations Expenses	Operations Deficit	Capital Funding	Capital Costs	Capital Surplus (Shortfall)
\$2,263,400	\$2,263,400	\$ —	\$1,059,700	\$630,600	\$492,100

Service Profile

SamTrans currently operates 76 public transit routes on the Peninsula providing fixed route service primarily between 6:00 am and 7:30 p.m. SamTrans also provides special service to sporting and recreational destinations in San Mateo County and intercounty service with the City and County of San Francisco and Santa Clara County. SamTrans fleet consists of 323 vehicles. SamTrans provides paratransit services under contract with Laidlaw Corporation using 60 small lift equipped buses and contracts with taxi and lift-van companies to provide ADA paratransit service.

Financial Profile

Operating Budget

SamTrans is primarily funded with fares (17%), TDA funds (32%), and San Mateo County transit district ½¢ sales tax funds (46%). The adult base cash fare is \$1.10 for local service and express service cash fares cost from \$2.50 to \$3.00. SamTrans also markets a monthly pass that costs \$38 for local service and \$54 to \$90 for express routes.

Capital Budget

Primary external capital fund sources for SamTrans include Federal Transit Administration (FTA) funds and State Transit Assistance (STA) funds. SamTrans also issues debt backed by its sales tax to partially finance the extension of BART to the San Francisco Airport and the Caltrain Intermodal Station in Millbrae.

SamTrans RTP Issues

Overview and Service Element

Over the 25 year period of the 2001 RTP, SamTrans is anticipated to remain at its current level of service with modest restructuring of routes to better serve the extension of BART to the San Francisco Airport and Caltrain Intermodal Station in Millbrae.

Financial Element

SamTrans is projected to accumulate a \$429 million dollar surplus at the end of the 25 year RTP period, however SamTrans capital replacement requirements may be understated in the out years, and if the BART SFO extension does not cover its operating expenses with fares, SamTrans will have to make up the difference. Robust growth projected for taxable sales in San Mateo County based on recent strong trends also contributes to this projected surplus. SamTrans currently operates with a farebox recovery ratio of 21% and this is anticipated to remain constant through 2026.

Operating Budget

SamTrans is projected to be able to fund its current level of service through 2026.

Capital Budget

Primary capital funding sources for SamTrans are Federal Transit Administration (FTA) funds. SamTrans is also eligible for AB 664 bridge toll revenues. SamTrans is able to fund a significant portion of its capital funding requirements from the San Mateo County transit district ½¢ sales tax revenues it receives and is projected to have sufficient funding to meet capital replacement and enhancement needs associated with the current level of service.

Major sources of capital replacement needs (which are fully funded), include:

•	Replacement Buses	48%
•	Replacement Vans	2%
•	Replacement of Facilities/Equipment	56%

Santa Clara Valley Transportation Authority (VTA)

2001 Regional Transportation Plan 25-Year Baseline Transit Operator Summary Capital and Operating Surplus/(Deficit) (2001\$ in 000s)

Operations Funding	Operations Expenses	Operations Deficit	Capital Funding	Capital Costs	Capital Surplus (Shortfall)
\$8,630,200	\$8,630,200	\$ <i>—</i>	\$4,925,300	\$2,113,300	\$2,812,000

Service Profile

VTA operates a fleet of 525 buses on 79 routes throughout the urbanized area of Santa Clara County, an area of 326 square miles, serving a population of 1.68 million persons and 15 cities. VTA also operates two light rail lines 24 hours per day -- the 20.8-mile Guadalupe Corridor LRT line and the 9.5-mile Tasman LRT line. Both VTA's bus and light rail services are accessible to individuals with disabilities and VTA also provides ADA paratransit service under contract. VTA is also a member of the Caltrain Peninsula Corridor Joint Powers Board that Caltrain contracts with AMTRAK to provide commuter rail service to Santa Clara County as far south as Gilroy.

Financial Profile

Operating Budget

VTA is primarily funded with fares (10%), TDA funds (28%), and transit district ½¢ sales tax funds (51%). The adult cash fare is \$1.25 and the express cash fare is \$2. VTA also provides several types of passes with a monthly pass priced at \$39 for local routes and \$63 for express routes.

Capital Budget

Primary capital funding sources for VTA include Federal Transit Administration (FTA) funds, State Transit Assistance (STA) funds, and its transit district ½¢ sales tax funds and Santa Clara County's Measures A and B local ½¢ sales tax funds. VTA is also eligible for STIP funds for rail extension projects and has received FTA New Rail Starts funding for the Tasman LRT Extension.

VTA RTP Issues

Overview and Service Element

Over the 25 year period of the 2001 RTP, VTA ridership is projected to grow significantly as a function of the rapid population and employment growth anticipated to continue in Santa Clara County. The service levels projected assume the Tasman LRT extension east to Alum Rock in San José and the Vasona line, scheduled to begin service in 2005. The VTA's thirty year sales tax for transit projects will fund some additional light rail lines, not all of which have been specified yet.

Financial Element

VTA is projected to end the 25 year 2001-2026 period with a surplus of \$2.8 billion dollars based on operating LRT projects (Tasman East, Capitol, Vasona and Downtown East Valley) fully funded by both sales tax measures. The projected surplus is the result of projected significant growth in taxable sales in Santa Clara County over the next 25 years summing existing service levels. MTC's recently adopted Regional Transit Expansion Program includes the BART extension to SanJose/Santa Clara but its projected costs and revenues are not included in these RTP Baseline projections.

Operating Budget

VTA is not projected to incur any operating deficit from maintaining existing service levels. VTA has a current policy of gradually increasing fares in alternate years and as a result expects to achieve a 22.4 percent operating cost recovery ratio by 2009; while short of the VTA's 25% operating cost recovery ratio target established in their Strategic Plan, the projected operating cost recovery ratio represents a major improvement from prior levels and show a rising tend. Development of other new sources of operating revenues other than fares may also be developed to help achieve VTA's Strategic Plan goal. As noted above, a projected RTP surplus of \$2.8 billion dollars would be used to fund and operate a program of rail and bus expansion over the 25-year RTP period.

Capital Budget

Primary outside capital fund sources for SCVTA include local half cent sales taxes, Federal Transit Administration (FTA) funds, and STIP funds. SCVTA receives all of the FTA funds in the San Jose Urbanized Area except for funds apportioned to Caltrain.

The major sources of capital rehabilitation needs (which are fully funded), include:

•	Bus Replacement	47%
•	LRV Replacement	8%
•	Paratransit Van	1%

Small Operators

Overview

The small transit operators have been aggregated by county for purposes of developing 25 year RTP financial projections. Where available, projections are based on an operator's Short Range Transit Plan; however, some of the small transit operators are not required to prepare a Short Range Transit Plan, and in these instances MTC has developed projections based on their current budget and revenue vehicle fleet data.

Financial Element

MTC's of TDA revenue projections are the primary source of funding for these systems and based on MTC projections these funds will adequately fund each county's small operators over the 25-year RTP period with significant revenue surpluses in each case. These surpluses probably are overstated because the absence of detailed replacement data from the operators in the out years, which, if available, would result in increased capital replacement costs and reduced funding surpluses. Another factor that will reduce surpluses is the need to expand transit service in the rapidly growing suburban areas served by these operators. This future expansion has not been incorporated in these projections. The small operators included are:

Alameda County: • Union City Transit

Contra Costa County: • Tri-Delta

West Contra Costa Transit Agency

Napa County: • VINE/Napa Valley Transit

Solano County: • Fairfield/Suisun City

BeniciaDixonVacaville

Sonoma County: • Santa Rosa Transit

Sonoma County Transit

Petaluma Transit

Healdsburg

Cloverdale

Small Operators 2001 Regional Transportation Plan (RTP) 25-Year Baseline Transit Operator Summary

Capital and Operating Surplus / (Deficit) (\$000's)

County	Operations Funding	Operations Expenses	Operations Surplus / (Deficit)	Capital Funding	Capital Costs	Capital Surplus / (Shortfall)
Alameda	65,000	65,000		40,400	10,500	29,900
Contra Costa	367,200	367,200	_	178,700	98,100	80,600
Napa	126,600	126,600	_	78,900	32,600	46,300
Solano	160,300	160,300	_	204,700	81,900	122,800
Sonoma	382,800	382,800	_	250,700	124,500	126,200
Total	1,101,900	1,101,900	_	753,400	347,600	405,800

1.3 LOCAL STREETS AND ROADS, NON-PAVEMENT AND BRIDGE NEEDS FINANCIAL ANALYSIS

Local streets and roads are an integral part of the Bay Area's transportation network and represent a huge investment of public resources. One goal of MTC has been to work with cities and counties to identify and manage needed repairs to their local streets and roads networks. MTC advocates the adoption of preventative maintenance programs as a cost-effective approach to maintaining and extending the serviceability of these networks. Currently, deterioration of the Bay Area's roadways has created large backlogs in a majority of jurisdictions where the cost of needed maintenance far exceeds available funds.

MTC has been documenting the discrepancy between local streets and roads revenues and expenditures for cities and counties in the Bay Area since the early 1980s in order to understand the complete funding picture for the local streets and roads. This section describes how MTC prepares revenue estimates and needs assessments for local streets and roads:

- Pavement maintenance
- Non-pavement maintenance (lights, safety, drainage, sidewalks, etc.)
- Local bridge maintenance (seismic, reconstruction, barrier rail)

MTC is committed to maintaining a regional network for freeways and local arterials called the Metropolitan Transportation System, or MTS. The RTP fully funds MTS pavement rehabilitation needs. Despite a commitment of nearly \$700 million in RTP Track 1 funds, non-MTS pavement, non-pavement and local bridge maintenance shortfalls total about \$2.5 billion; funds for these shortfalls would have to come from new revenue sources identified in MTC's Blueprint (see Part 7).

PAVEMENT MAINTENANCE

25-Year Pavement Funding Shortfall Estimates
(In Millions of 2001 Dollars)

County	Pavement Needs			Pavement Shortfall		MTS Pavement Shortfall		Non-MTS Pavement Shortfall	
Alameda	\$ 852.8	\$ 574	.9 \$	277.9	\$	24.7	\$	253.2	
Contra Costa	\$ 681.2	\$ 515	.2 \$	166.0	\$	15.6	\$	150.4	
Marin	\$ 203.5	\$ 128	.5 \$	75.0	\$	11.6	\$	63.4	
Napa	\$ 221.1	\$ 116	.9 \$	104.2	\$	8.4	\$	95.8	
San Francisco	\$ 344.3	\$ 198	.3 \$	146.0	\$	21.9	\$	124.1	
San Mateo	\$ 475.6	\$ 359	.5 \$	116.1	\$	8.8	\$	107.3	
Santa Clara	\$ 1,146.4	\$ 972	.0 \$	174.4	\$	6.1	\$	168.3	
Solano	\$ 285.9	\$ 173	.8 \$	112.1	\$	8.9	\$	103.2	
Sonoma	\$ 494.3	\$ 268	.0 \$	226.3	\$	23.1	\$	203.2	
TOTAL	\$ 4,705.1	\$ 3,307	.1 \$1	,398.0	\$	129.2	\$	1,268.8	

As a result of recent studies, MTC estimates that \$4.71 billion dollars will be needed for pavement management through the year 2025. Projected revenues over the same time period are expected to be only about \$3.31 billion dollars, resulting in a funding shortfall of \$1.4 billion dollars over the next 25 years. These figures were derived from the 80+jurisdictions (compared to only 34 jurisdictions in 1998) within the nine Bay Area counties that are currently using MTC's Pavement Management System (PMS).

Methodology

The methodology used to produce the pavement maintenance shortfall estimates consists of three basic steps. First, estimates of pavement revenues are prepared using historical data and projected growth rates. Local street and road (LS&R) funding is typically derived from a combination of gas tax, sales tax, and local revenues. A percentage of the total LS&R revenues are then apportioned for pavement related expenses. Second, these revenues are entered into MTC's Pavement Management System (PMS) for each jurisdiction and applied against the jurisdictions' projected pavement expenditure needs. The difference between the projected needs and revenue estimates is the projected shortfall. Lastly, the pavement maintenance shortfall for the 80+ jurisdictions that use the PMS system is expanded to obtain the shortfalls for the remaining Bay Area jurisdictions.

Pavement Revenue Projections

Estimates of pavement revenues were prepared using the past 18 years of State Controller Data for each of the cities and counties. Each year's figure was escalated up to current dollar values using an inflation factor provided by our Finance Department. The figures for each of the 18 past years were then averaged in order to obtain a starting point for the year 2000.

Each of the cities and counties spend a different percentage of their total street and road budget on pavement related expenditures. This percentage was calculated by the State Controller's Data using the past 18 years of data to establish an historical percentage trend. The resultant percentage was then applied against each of the jurisdictions' local streets and road revenues for the 25-year analysis period. In some instances, the percentages applied were modified based on input from the jurisdictions themselves.

Pavement Needs Projections

The PMS model develops a list of recommended treatments, classified as either preventative maintenance or rehabilitation, and prioritizes these treatments based on a weighted effectiveness ratio. Within the constraints of the input budget, the PMS model will select the most cost-effective treatments for implementation and defer the remainder. When treatments are deferred, however, stop-gap maintenance (e.g., pothole patching) must be applied in order to maintain serviceability and reduce liability. Based on the recommended treatments and estimated costs, the PMS model calculates the amount of preventative maintenance, rehabilitation, and stop-gap repairs funded each year, as well as the amount of deferred maintenance.

Pavement Needs for the Entire Bay Area

The needs estimates for the jurisdictions that we did not have data for were estimated based on the proportion of centerline miles to the total centerline miles for that jurisdiction's county. The total needs for the jurisdictions with available data were summed, by county, and then the resulting figure was increased by a factor that represented the proportion of missing to available centerline miles for each county.

Shortfall Projections

To arrive at the total pavement shortfall for each of the Bay Area counties, the total projected pavement revenues for each jurisdiction was subtracted from the projected needs for that jurisdiction. The resultant number represents the shortfall in pavement revenues.

The county shortfall totals are then categorized into Bay Area MTS routes and non-MTS routes. The total shortfall is multiplied by the ratio of centerline miles on the MTS system versus not on the MTS system in order to determine the breakdown. The RTP gives priority to fully funding pavement shortfalls on local roads that are a part of the MTS.

RTP Track 1 Investment

MTC fully funds the estimated \$129.2 million MTS pavement shortfall. The county congestion management agencies funded about \$500 of the non-MTS pavement shortfall, leaving an approximate \$700 million shortfall to be funded by Blueprint revenues.

NON-PAVEMENT MAINTENANCE

25-Year Non-Pavement Funding Shortfall Estimates (In Millions – 2001 Dollars)

County	Non-Pavement Needs	Non-Pavement Revenues	Non-Pavement Shortfall	Non-Pavement MTS Shortfall	Non-Pavement Non-MTS Shortfall	
Alameda	\$ 1,051.7	\$ 709.1	\$ 342.6	\$ 30.5	\$ 312.1	
Contra Costa	\$ 567.7	\$ 429.3	\$ 138.4	\$ 13.0	\$ 125.4	
Marin	\$ 352.7	\$ 222.8	\$ 129.9	\$ 20.1	\$ 109.8	
Napa	\$ 260.8	\$ 137.8	\$ 123.0	\$ 10.0	\$ 113.0	
San Francisco	\$ 262.9	\$ 151.4	\$ 111.5	\$ 16.7	\$ 94.8	
San Mateo	\$ 463.4	\$ 350.3	\$ 113.1	\$ 8.6	\$ 104.5	
Santa Clara	\$ 1,763.7	\$ 1,495.4	\$ 268.3	\$ 9.4	\$ 258.9	
Solano	\$ 320.5	\$ 194.8	\$ 125.7	\$ 9.9	\$ 115.8	
Sonoma	\$ 384.5	\$ 208.5	\$ 176.0	\$ 18.0	\$ 158.0	
TOTAL	\$ 5,427.9	\$ 3,899.4	\$ 1,528.5	\$ 136.2	\$ 1,392.3	

Street lights, drainage systems, storm damage, sidewalk, and bike path rehabilitation needs make up the non-pavement maintenance costs.

Methodology

Estimates for non-pavement LS&R revenues are determined in a similar manner as are pavement revenues. Funding comes primarily from gas and sales tax revenue, and local funds. Based on historical data for the last 18 years, an average percentage of the total LS&R revenues used for non-pavement expenditures is determined. This percentage is applied to the projected total LS&R revenues through the year 2025 in order to obtain the projected non-pavement revenues over the 25-year period.

The non-pavement needs projection is determined by first determining the average historical ratio of pavement to non-pavement needs. That ratio is then applied to the pavement needs in order to determine the non-pavement needs for the 25-year period by county.

The non-pavement shortfall for each county us determined by subtracting the projected revenues from the projected needs. The total shortfalls for each county are further categorized into MTS and non-MTS shortfalls.

Estimate of Non-Pavement Shortfall

MTC estimates that non-pavement needs through the year 2025 will amount to about \$5.4 billion dollars. Revenues over the same time period are estimated to total only \$3.9 billion dollars, resulting in a total shortfall of approximately \$1.5 billion dollars.

RTP Investment

The RTP Track1 accounts for about \$13 million of the \$1.5 billion non-pavement shortfall estimate, leaving the remainder for Blueprint revenue

LOCAL BRIDGE MAINTENANCE

25-Year Bridge Funding Shortfall Estimates
(In Millions of 2001 Dollars)

County	Bridge Needs		Bridge Revenues	Bridge Shortfall		Bridge MTS Shortfall		Bridge Non-MTS Shortfall	
Alameda	\$	74.2	\$ 59.8	\$ 14.4	\$	9.3	\$	5.1	
Contra Costa	\$	92.0	\$ 92.0	\$ -	\$	-	\$	=	
Marin	\$	17.8	\$ 14.6	\$ 3.2	\$.6	\$	2.6	
Napa	\$	35.4	\$ 20.6	\$ 14.8	\$	8.6	\$	6.2	
San Francisco	\$	34.7	\$ 34.7	\$ -	\$	-	\$	-	
San Mateo	\$	68.2	\$ 46.3	\$ 21.9	\$	6.0	\$	15.9	
Santa Clara	\$	99.1	\$ 99.1	\$ -	\$	-	\$	-	
Solano	\$	23.1	\$ 23.1	\$ -	\$	-	\$	-	
Sonoma	\$	78.0	\$ 26.1	\$ 51.9	\$	18.5	\$	33.4	
County TOTAL	\$	522.6	\$ 416.3	\$ 106.3	\$	43.0	\$	63.2	

Between the nine Bay Area counties, there were a total of 1,989 bridges counted in the local bridge network. Caltrans' Pontis Bridge Management program (BMS) was used to determine a bridge condition index on a scale of 0 to 100, with 100 being the best possible score. The Pontis program utilizes a form of this index in order to determine future bridge maintenance and replacement needs. The Bay Area's bridges scored well overall with a bridge health index of 92.1 based on recent surveys.

In addition to the index, Caltrans also uses a sufficiency rating that is used to determine existing bridge maintenance and replacement needs, and whether a bridge is sufficient enough to remain in service. The sufficiency rating addresses the bridges' structural adequacy and safety, serviceability and functional obsolescence and essentiality for public use. The sufficiency rating also uses a scale ranging from 0 to 100 where:

- 0 to 59 is insufficient;
- 60 to 80 is acceptable;
- Greater than 80 is sufficient.

The overall sufficiency rating for the Bay area was 79.6, with 36% of local bridges having a sufficiency rating of less than 80 and 9.5% having an insufficient rating of less than 50.

Methodology

Determining the overall Bay Area bridge maintenance and replacement shortfall through the year 2025 consisted of the following steps:

- Estimate projected revenues based on current Caltrans data, predicted economic and population factors, and historical patterns.
- Determine existing bridge replacement and maintenance needs based on current Caltrans inspection & sufficiency rating data.

- Forecast future bridge replacement and maintenance needs utilizing the Caltrans Pontis Bridge Management System database.
- Estimate the 25-year shortfall based on the difference between available revenues and predicted needs.

Bridge Revenue Projections

Although funding for local bridge needs comes through a variety of different sources, only three sources were considered in estimating future local bridge revenues through 2025 since they constitute the majority of the available funds. The three sources used included:

- Federal HBRR (Highway Bridge Replacement and Repair) funding;
- County sales tax measures where applicable; and
- Motor vehicle fuel tax subvention.

In order to forecast revenues from each of the three sources over the 25-year period, MTC relied on existing statewide fund forecasts developed by Caltrans, historical patterns for determining percentage splits of revenues between the nine Bay Area counties and jurisdictions, as well as predicted population and economic factors provided by our Finance Department.

Bridge Needs Projections

The 25-year projected maintenance and replacement needs for Bay Area local bridges were determined through the use of the Pontis Bridge Management System (BMS) in conjunction with existing Caltrans data.

Pontis stores the Caltrans bridge inventory and inspection data, formulates network-wide preservation and improvement policies for use in evaluating the needs of each bridge in a network, and makes recommendations for what projects derive the maximum benefit from limited funds. The deterioration and cost rates for bridge maintenance and replacement were provided by Caltrans and are current.

On a year-by-year basis, the bridge needs are assessed and the revenues are applied to the optimal projects. The next year's needs would then include any unmet needs from the previous year, an interest expense applied to the unmet needs each year, as well as any new needs generated based on the deterioration of each structure.

Needs associated with bridge maintenance and replacement are assigned to the following categories:

- Bridge Replacement
- Bridge Rehabilitation
- Seismic Retrofit
- Barrier Rail Replacement
- Bridge Painting
- Other

Of the 1,989 bridges included in the study, 31 are in need of reconstruction, 22 are in need of rehabilitation, 84 bridges are in need of seismic work, 33 are in need of rail replacements, and 333 are in need of various other improvements.

Shortfall Projections

To arrive at the total bridge shortfall for each of the Bay Area counties, the total projected bridge revenues were subtracted from the estimated bridge needs for the 25-year period. The resultant number represents the shortfall in bridge maintenance and replacement funding through the year 2025. In some instances, a "surplus" was forecast. Since local bridge revenues are but a portion of a larger street and roads budget, it was assumed that these funds would be diverted for other public works needs within the counties. Thus, for those jurisdictions with a resulting surplus, local bridge needs were made to equal projected local bridge revenues.

MTC estimates that county bridge maintenance and replacement needs through the year 2025 will amount to about \$522.6 million. Revenues over the same time period are estimated to total only \$416.3 million, resulting in a total shortfall of approximately \$106.3 million dollars over the next 25 years.

RTP Investment

The county congestion management agencies commit approximately \$8million of Track 1 funds toward the estimated \$106.3 million bridge maintenance and replacement shortfall, leaving the remaining \$98 million shortfall to be funded by new Blueprint revenues.

1.4 SURFACE TRANSPORTATION PROGRAM (STP) PLANNING FUNDS

Under prior agreements with the Congestion Management Agencies (CMAs), MTC has provided planning funds equivalent to approximately three percent of the region's ISTEA Surface Transportation Program (STP planning) funds in order to carry out planning functions as established under State and Federal statutes. In particular, CMAs have played a key role in developing and implementing the multi-modal planning and programming process, establishing project priorities within the county, and monitoring project delivery. Several of these tasks were direct by-products of the Congestion Management Program, while others grew out of the overall cooperative relationship between MTC and the nine CMAs.

CMAs or a substitute agency (counties may opt out of the CMP requirements under AB 2419) will receive STP planning funding, based on the provisions included in the MOUs to continue their planning and programming roles and to address responsibilities as newly established under Senate Bill 45 and in TEA-21.

Methodology For Determining Future Funding Needs. The methodology used assumes continuation of current funding for Congestion Management Agencies. The RTP assumes funding of about \$50 million over the 25 years for these programs. This amount is approximately three percent of the total STP funding received by the region over the 25-year RTP period. Funds are distributed to the counties on a population basis, except for the smaller counties (Marin, Napa, Sonoma, and Solano counties) which receive the minimum guaranteed amount under this program which is greater than their population share.

1.5 TRANSPORTATION FOR LIVABLE COMMUNITIES (TLC): PLANNING, CAPITAL, AND HOUSING INCENTIVE PROGRAM (HIP)

The Transportation for Livable Communities (TLC) Program reflects policy goals developed by MTC to foster livability and enhance alternatives to auto travel.

In 1995, MTC adopted a "Transportation/Land Use Connection" policy statement. Specifically, MTC encourages community plans that:

- Enable residents to use a range of travel modes, including transit, walking and biking, employment access, shopping, recreation and other daily needs.
- Provide that the streets, transit, pedestrian and bicycle ways are part of a system of integrated routes.
- Provide for development of housing and regional activity centers that are accessible to the regional transit network.
- Provide for a diversity of development and other community-oriented transportation strategies designed to limit the extent to which it is necessary to travel from one community to another to access basic necessities of living.
- Provide for the design of streets and other transportation facilities and amenities that are integrated into the overall community design and are conducive to a sense of community identity and pride.

MTC created a special initiative called the Transportation for Livable Communities (TLC) Program in 1998 to fund and support the planning and development of small-scale transportation investments that meet community needs throughout the Bay Area. The TLC Program's primary goal is to support transportation projects that 1) have been developed through a collaborative and inclusive planning process; 2) encourage pedestrian, transit and/or bicycle trips; 3) provide for compact development of housing, downtowns, and regional activity centers; 4) are part of a community's development or redevelopment activities; and 5) enhance a community's mobility, identify and quality of life.

MTC offers three kinds of financial assistance through the TLC Program. Projects in the early or conceptual stage of their development are eligible for *planning grants*, which are awarded to help sponsors refine and elaborate promising project ideas. Projects with completed plans and collaborative planning processes are eligible for *capital grants*, which directly support construction and help turn plans into reality. And lastly, under the newly created *Housing Incentive Program*, cities and counties are eligible to receive transportation funds for capital projects when proposing housing developments adjacent to major transit service.

Planning Grants

MTC provides funding for planning efforts that aim to revitalize a community. The main purpose of these planning grants is to facilitate extensive community input into the development of concept plans and specific projects that can then compete for capital funding at the regional level. These plans are intended to be part of an area's larger community development efforts, such as increased housing, mixed-use development and downtown revitalization. TLC planning projects typically include extensive community

outreach and visioning, concept plans and drawings, construction cost estimates, and implementation plans. Grant range in size from \$5,000 to \$75,000 per project.

Capital Grants

TLC capital grants support transportation projects with completed plans that have been developed through an extensive collaborative planning process. The planning process involves community stakeholders who would be affected by the projects and builds on partnerships between local agencies, transportation agencies, community organizations, and businesses. Capital projects include transportation-related improvements such as streetscapes, transit villages, bicycle facilities, and pedestrian plazas. Capital grants range in size from \$150,000 to \$2 million per project.

Housing Incentive Program

In November of 2000, MTC expanded the TLC Program to include a Housing Incentive Program (HIP) to encourage the creation of housing adjacent to existing transit facilities, which broadens the portfolio of programs linking transportation and land use decisions. Based on a similar program developed in San Mateo County, HIP offers seed money to local jurisdictions that provide new housing in the vicinity of public transit hubs.

The HIP seeks to maximize public investments in the transit infrastructure, encourage transit use, and address regional housing needs by: 1) increasing the housing supply in areas of the region where transportation infrastructure already exists to serve transportation needs; 2) supporting livable communities where walking, bicycling and riding transit are viable transportation choices; 3) encouraging transit ridership through the location of housing and mixed use development at transit stops throughout the region; and 4) forging partnerships between transportation and land use professionals by offering incentives for transit-oriented housing.

Cities and counties are eligible to receive funds for housing developments that are being planned for construction in the next two years and are within a 1/3-mile walk of a major transit service (15-minute service intervals or better). Housing developments must be compact, with 25, 40, or 60 units per acre. The number of units and bedrooms per acre determines the total grant award. Funds may be used for TLC capital projects anywhere within the applicant's jurisdiction.

Funding

The TLC program is financed with federal and regional transportation funds. Funding for the TLC Planning program comes from a portion of MTC's Transportation Development Act allocation (at approximately \$475,000 per year). The TLC capital program is funded through federal funds made available through a combination of federal Congestion Mitigation and Air Quality Improvement Program (CMAQ) funds (at \$5 million per year) and Transportation Enhancement (Enhancements) Program funds (at \$4 million per year), which totals \$54 million over the six-year TLC Capital Program. MTC allocated \$9 million from the TLC Program to fund the first round of the HIP.

As of February 2002, the TLC Program has funded 44 planning projects totaling \$1.2 million and 45 capital projects totaling \$35.7 million, as well as awarded 15 local agencies with over \$8 million in HIP funding. An additional \$500,000 in TLC planning funds will be awarded in March 2002, and approximately \$9 million will be available for the upcoming FY 2002 TLC capital cycle, which is the last grant cycle under TEA-21.

Methodology For Determining Future Funding Needs. The funding level for the TLC Program is proposed to triple, primarily to meet the overwhelming demand for TLC grants and deliver much needed high-quality, high-impact transportation projects in Bay Area neighborhoods. The RTP assumes about \$420 million (in 2001 dollars) of Surface Transportation Program/Congestion Mitigation and Air Quality and Enhancements funds will be used for the TLC Program over the 25-year period. One-third of the total TLC funds will be returned to the nine counties for county-level TLC programs.